**FHWA Bicycle and Pedestrian Transportation University Course**

**Module: 8 – Designing for Walking and Bicycling**

**Assignment: Corridor Observations**

**PURPOSE**

The purpose of this assignment is for students to develop the background information and fact base pedestrian and bicycle planners would need in order to support a planning effort or intervention for a small area, chosen either by the students or the instructor (recommended study area would include 2-3 linked street segments and intersections connecting those segments; overall study area should be no longer than ½ mile in length and should contain multiple land uses and conflict areas). Students should work on this assignment in 2 to 4-person groups.

Students’ primary task is to evaluate the conditions for individuals traveling via foot or bicycle through the study area. Groups should submit their findings in the form of a written report. This assignment has three components: inventory, behavioral observation, and compilation and submission of deliverables. This is a labor-intensive assignment, with field work and written work components.

**PROCESS**

**Component 1: Inventory**

Conduct a thorough inventory of each street segment and intersection in your study area. Instructors may choose whichever audit tools they prefer. For segments, the PEDS audit tool is simple and easy to understand. It is no longer readily available online, but the data collection form is included at the end of this document. There are few comparable tools for intersections, although the inventory portion of the FHWA Ped and Bike ISI tools are a useful (available: <https://www.fhwa.dot.gov/publications/research/safety/pedbike/06130/06130.pdf>). If using the FHWA ISI tools, simplify it as follows:

* Only evaluate intersections as they would be traversed by an individual traveling between an origin and destination
* Do not calculate the actual ISI; simply collect data as required by the pedestrian and bike models (pages 8 and 11, respectively)
* Do not provide ADT
* Report posted speed of the main street rather than the 85th percentile

Another audit option that includes more open-ended questions.

* North Carolina Pedestrian and Bicycle Road Safety Assessment Guide (Pages 32-35 for background; pages 36-38 for prompt lists of questions). Available: <https://connect.ncdot.gov/projects/research/RNAProjDocs/RSA_Guide_FINAL.pdf>

In addition to (or instead of) the audits, provide a sketch of on-the-ground conditions for each segment and intersection, including width, presence of curbs, location of drains, lighting, bus stops, hazards, amenities, and wayfinding aids (instructor may provide templates following the attached examples, or students may work from a blank slate). Attach photos or sketches of hazards and wayfinding aids if possible.

Sidewalk and bicycle lanes/paths should be measured manually. Students may use aerial imagery to determine roadway and intersection dimensions. Please do not attempt to measure roadway or intersection widths manually.

**Component 2: Behavioral observations**

As they conduct their fieldwork, students should take note of how people are currently using the streets in the study area. For example, do people seem to be enjoying the environment? Do they seem unusually stressed? Are they using facilities in the intended manner (e.g., traveling in the correct direction)? Are they traveling quickly or slowly? If bicycling, what category of bicyclist are they? Do children use the street? Do people tend to travel in groups, or singly? What can be deduced about individuals’ travel purposes and needs? Is there evidence of how people use space even when they are not present? Each team should submit a 500 to 1000-word write-up of how various individuals use the space, and how those behaviors ought to inform future design recommendations.

**Component 3: Compilation and submission of deliverables**

Each group should submit a single final deliverable in electronic format. Scan sketches and completed audit instruments if necessary. Do not submit original sketches. The deliverable should be submitted as a pdf with numbered pages and should include (in this order):

1. a cover page describing the study area and all names of group members,
2. completed audit instruments, if used (properly labeled),
3. segment sketches and notes, if any (properly labeled),
4. intersection sketches and notes, if any (properly labeled),
5. other photos or sketches (properly captioned)
6. write-up of observations and implications

**Tips:**

When to observe: Observe behaviors twice, under different conditions (e.g., during peak and non-peak hour travel, on a weekday and a weekend, etc.). Ideally, observe under prevailing weather conditions for the region and time of year.

Where to observe: Choose a vantage point that allows you to see the entire segment or intersection, but do not block travel paths for pedestrians, bicyclists, or other modes. Park benches, bus shelters, café windows make good places from which to observe. Try to blend in; otherwise your presence may lead travelers to alter their typical behavior through the study area.

**GROUND RULES FOR CONDUCTING FIELD WORK**

1. Safety first. Do not put yourself in harm’s way to collect data. Online map imagery may be substituted for photographs from the field as needed to ensure student safety.
2. Travel and collect data in groups of two or more students. Team members must work together to find data collection times that ensure no team member has to collect data alone. Conducting fieldwork alone is not permitted, for reasons of safety, accountability, and accuracy of data.
3. Do not conduct field work after dark. When visibility is poor, you jeopardize your safety and the quality of the data you are collecting.
4. If members of the public are curious about what students are doing, students should inform them they are university students working on a class project. They may engage with neighbors wanting share their thoughts and ideas about mobility in the study area, but not initiate such conversations.
5. Do not block or otherwise interfere with traffic (motorized or not).
6. Students may take photos but must do so respectfully and carefully. Do NOT take photos of people, their homes, or their vehicles without their permission.

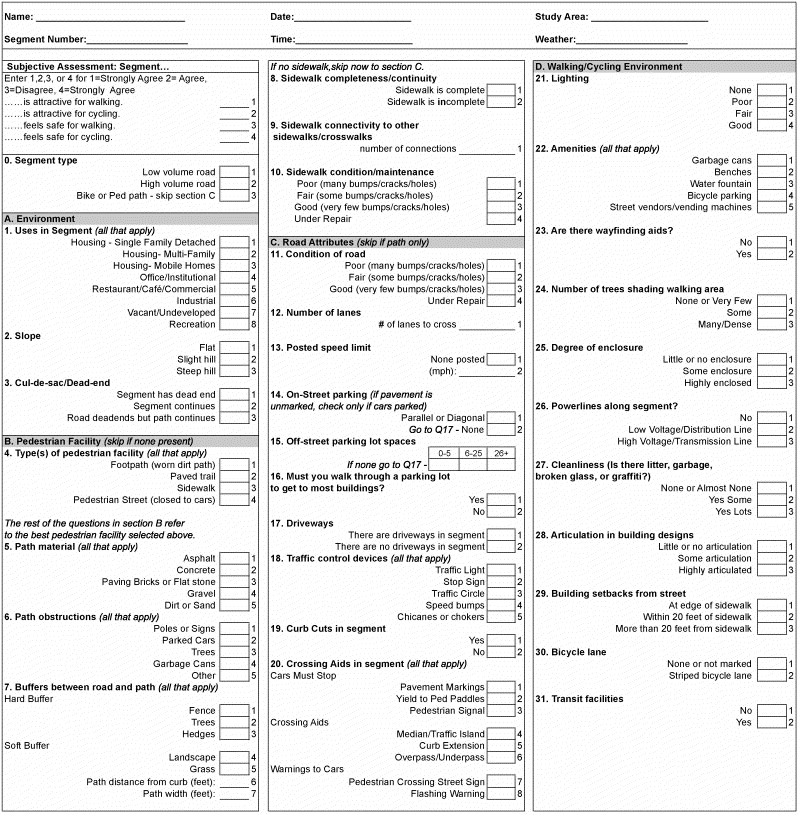


Figure 1 in Clifton, K. J., Smith, A. D. L., & Rodriguez, D. (2007). The development and testing of an audit for the pedestrian environment. Landscape and urban planning, 80(1-2), 95-110. <https://doi.org/10.1016/j.landurbplan.2006.06.008>